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ON THE VIABILITY OF MICROENTERPRISE CREDIT PROGRAMS: FOUR CASE STUDIES

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Abstract

This paper explores the viability of microenterprise credit programs funded by the Inter-American Development Bank. It provides a conceptual framework that emphasizes the importance of financial management and of quality of services for the success of the program and institutional survival. It evaluates four programs, in Paraguay, Colombia, Mexico, and the Dominican Republic, from the perspective of this conceptual framework. Lessons learned include the need for adequate information systems that focus on institutional viability, rather than on beneficiary impacts; the need for the organization to be concerned about self-sufficiency and growth; the strengths of a minimalist approach; the importance of positive real interest rates; and the strong need for portfolio diversification.

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by

Claudio Gonzalez-Vega and Rodrigo A. Chaves[2]

I. Introduction

In recent years there has been an increasing interest among governments, international agencies, a growing number of private voluntary organizations (PVOs), and professionals concerned with economic development, regarding the demand for credit and for other financial services by small and microenterprises, both in the urban and the rural areas of the developing nations. This growing interest has been reflected in numerous programs and proposals to increase the flow of credit for microenterprises, as well as by the design of specific mechanisms aimed at increasing the access of small entrepreneurs to sources of funding for their productive activities. These targeted efforts and many of the approaches designed to implement them are reminiscent of the interest in the "credit needs" of the small farmers that permeated many donor activities in the 1960s and 1970s.

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[1] This paper was prepared for the Office of External Review and Evaluation (ORE) of the Inter-American Development Bank (IDB), as background material for the Study of the IDB's Experience with Microenterprise Credit Programs, under the direction of Alicia Pfund. The authors are solely responsible for the views expressed here. These views may or may not be shared by the sponsoring institution.

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The unsatisfactory performance of many of the small farmer credit programs of the past few decades has been extensively documented.[3] The lessons learned from those experiences should serve, for that reason alone, as a guide for the design and implementation of the new microenterprise credit programs, frequently based upon similar assumptions. In a few instances, those experiences have actually influenced the organization of the new programs and, when this has been the case, the prospects for success have substantially increased. When the same mistakes of the past have been repeated, on the other hand, a similarly generalized failure may be expected. The criteria for the evaluation of microenterprise credit programs used in this paper is, to a large extent, derived from the lessons associated with the performance of the small farmer credit programs of the past.[4]

As in earlier decades, most programs have been designed on the generalized assumption that the lack of access to credit is one of the most binding constraints faced by a microentrepreneur. Although this may be the case in many instances, access to credit is not a cure for all of the small enterprise problems. Moreover, many programs that have disbursed "loans" may hardly be considered genuine credit activities. In many instances, there has hardly been any evaluation of the borrowers' capacity to pay the loans. There has been little concern with creditworthiness, in general, although the determination of who is creditworthy and who is not is one of the most important dimensions of a credit activity.

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[3] See, for these purposes, Dale W Adams, Douglas H. Graham, and J. D. Von Pischke, eds. Undermining Rural Development with Cheap Credit, Boulder, Colorado: Westview Press, 1984.

[4] See Claudio Gonzalez-Vega, "El Financiamiento de la Pequeña Empresa," in Claudio Gonzalez-Vega and Tomas Miller-Sanabria, eds. Financiamiento y Apoyo a la Microempresa, San Jose, Costa Rica: Academia de Centroamerica, 1990.

Only in a few instances have there been vigorous efforts to collect the loans, although the recuperation of the loan portfolio is essential to guarantee the permanency of the program. A permanent program is required, in turn, to offer valuable and reliable services to the microenterprise clientele. Otherwise, the program will not be valuable to the microentrepreneurs. A single, once-in-a-lifetime loan does not solve any small firm's problems.

If, in addition, the interest rates charged on the loans do not reflect the opportunity cost of the funds as well as the costs of the intermediary, then one has a "transfer" activity rather than a "credit" program. The incentives and attitudes that surround transfers are very different from those required for the successful performance of a credit activity. Among other things, transfer and welfare programs require continuous infusions of new money and, as a result, their permanency and viability is entirely dependent upon the willingness of the external sources to continue funding the program. The outcome is a weak organization.

Most of these programs are not only inadequate as credit tools, therefore, but in addition they do not offer deposit facilities and other financial services to the microentrepreneur. There is a substantial demand among small enterprises, however, for safe, convenient, and reasonably rewarded deposit facilities. Access to such services should be provided, directly by the organization, or otherwise be sponsored by it.[5] Emphasis on credit supplies only, most likely subsidized loans, has pushed many organizations for the promotion of microenterprises beyond their institutional capabilities. Important questions about the role of

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[5] See Claudio Gonzalez-Vega, "Marco Teorico y Experiencias en el Financiamiento de la Pequeña Empresa," in Claudio Gonzalez-Vega and Tomas Miller-Sanabria, eds. Financiamiento y Apoyo a la Microempresa, cit.

credit and about institutional design must be resolved, therefore, for the successful implementation of a microenterprise credit program.

II. Conceptual Framework: Institutional Viability

The main ingredient for the success of a microenterprise credit program is its institutional viability. Only a viable program can promise permanent and reliable services to its clientele and can thereby grow in order to reach larger numbers of small enterprises. Experience has shown that the final borrowers benefit more when the program is sustainable. The four case studies reported here confirm this hypothesis.

A viable institution is self-sustaining and valued by its clientele. This requires an agency that is able to cover its costs, that provides high quality services, that reaches an increasing number of customers, that is dynamic in offering new services and products, and that actively searches for ways of improving its efficiency, as reflected by the level and the degree of dispersion of the transaction costs incurred by its clients and by the intermediary itself. Viable institutions possess credibility and are usually able to mobilize deposits from their beneficiaries and funds from other local sources, they collect their loans, and retain good management and staff.[6]

To improve their viability, microenterprise credit programs must be able to increase the flow of their loanable funds, in real terms. The lending capacity of these programs becomes sustainable when they protect their portfolios from inflation, vigorously collect their loans, in order to be able to grant new credit, aggressively mobilize local resources, in order to widen the range of their services, and impose low transaction costs on their clientele.

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[6] See Claudio Gonzalez-Vega, "On the Viability of Agricultural Development Banks: Conceptual Framework," paper prepared for the Inter-American Development Bank (ORE), 1990.

When they lack viability, the survival of the microenterprise credit programs is questioned by their clientele. Increasing levels of loan default become the evidence of this loss of support. Loan delinquency is a signal that the borrowers are not interested in the survival of the institution. Since they do not expect the program to be able to provide a permanent service, the value of their relationship with the organization is low, and they do not take care to protect it with the timely service of their loan obligations.

When the microenterprise credit programs do not mobilize voluntary deposits from the local community, the programs' opportunities to grow on the basis of locally mobilized resources are diminished. A greater reliance on deposit mobilization has been critical for many financial intermediaries at a time when severe fiscal constraints have reduced the ability of governments to capitalize these institutions with budgetary transfers, when the targets of macroeconomic stabilization programs have eliminated access to rediscounting, and when the international debt crisis has reduced access to foreign savings. Deposit mobilization, on the other hand, is not an easy task and many microenterprise credit programs may want to address this issue by sponsoring the mobilization of client savings by developing links with already established intermediaries.

Viable microenterprise credit programs do not become instruments for political patronage. High levels of political intrusion and the biasing of their objectives away from efficient financial intermediation destroy them. In order to survive, these programs must emphasize their role as financial intermediaries. They must operate under the assumption that the efficient provision of financial services per se is an important contribution to the development of the microenterprise sector.

The traditional small farmer credit programs of the past were characterized by borrower domination. All practices and operational procedures were designed with the interest of the borrowers in mind; not for the sake of depositors or of the implementing institutions. Thus, the rapid disbursement of the funds was favored. Target clientele were chosen independently of their repayment capacity or without any guarantee of recuperation of the funds. Credit was subsidized. The results were disastrous.

To be viable, microenterprise credit programs must behave as if they were depositor-dominated institutions. In this case, the practices and procedures utilized would seek to protect the program's loanable funds. In this case, the borrowers' repayment capacity would be taken more seriously. In this case, the procedures for and efforts towards loan collection would be emphasized more than the quick disbursement of the funds. In this case, portfolio diversification would be used as a tool to manage risk, instead of concentrating all the loans in a few narrow activity types.

Borrower-dominated institutions have been characterized by the absence of a clear concept of risk in their operations. They have attempted, instead, to channel funds to target clientele, for specific purposes, rather than evaluating the borrower's repayment capacity and the degree of risk taken in each case. Within a depositor-dominated intermediary, on the other hand, a careful management of risk is the most important component of the organization's culture. Microenterprise credit programs, if they can not easily mobilize deposits, must in any case behave as if they were depositor-dominated institutions.

Many microenterprise credit programs have mistrusted the market and have minimized the role of interest rates as a major tool for resource allocation. These programs

have preferred, instead, the administrative determination of who to lend to and what to lend for. Because of their dependency on external funds, these decisions have been, in turn, frequently imposed from outside. They have insisted on rigidly targeting credit and on a detailed supervision of the use of the funds, as well. These efforts, despite their good intentions, have frequently resulted in unexpected negative consequences. Fungibility has frequently frustrated attempts to control the end uses of the loan funds and transaction costs have become too high, for the program as well as for the borrowers.

What is needed, therefore, are viable institutions, capable of offering a wide range of financial services, to a growing clientele, independently of the end use of the funds. If the interest rates charged are not subsidized, the borrowers will devote the funds to priority uses. They know better than anyone else how to efficiently use those funds. If the loans are expensive, they will certainly economize them.

The main responsibility of a microenterprise credit program is to keep the integrity of its loanable funds. The program keeps those funds in custody, in the name of donors and depositors (including international agencies) that entrusted those funds, so they could, in turn, facilitate the microenterprise productive activities. If the program does not protect these resources, it breaks its agreement with the suppliers of the funds, who expect to recuperate them. If this purchasing power is not protected, the intermediary will find it impossible to offer loan services to its borrowers, when these need its support.

To keep the integrity of its loanable funds, the program must avoid their erosion by inflation. This will only be possible if the rates of interest charged are positive in real terms; that is, if they are higher than the inflation rate. The institution's interest rate

policies must respond, therefore, to expected inflation rates. An intermediary that charges only 50 percent of nominal interest on its loans, with an inflation rate of 100 percent per year, will experience, on this account only, a reduction of the purchasing power of its portfolio to two-fifths, in only three years. Thus, it will be in a position to offer the same credit service to only 40 percent of its original clientele. If it tried to service all of these clients, it could offer no more than 40 percent of the purchasing power originally transferred. One way or another, the quality of the service would have deteriorated and the institution would lose the support of its clients.

Inflation forces financial institutions to revise their procedures. Accounting practices must be modified, in order to reflect the real value of assets and liabilities and to avoid decapitalization. The greater variability of prices that usually accompanies an inflationary process, frequently coupled with selective price controls, makes the evaluation of lending risks even more difficult. Portfolio management practices have to be revised.

In order to keep the integrity of its loanable funds, the institution must also collect its loans. An intermediary that each year loses 20 percent of its portfolio because of default will be decapitalized the same way as with an equivalent rate of inflation. Moreover, delinquency generates a negative demonstration effect. If others do not pay, and get away with it, why should I pay?

In order to keep the integrity of its loanable funds, an institution must avoid operational losses as well. This implies both a reduction of operating costs, avoiding waste and inefficiency, as well as sufficient revenues. Effectively earned interest is the main source of revenues for a financial intermediary. The rate of interest charged on the loans must cover

expected inflation and the institution's operating costs, while at the same time it makes it possible to build sufficient reserves against default losses. To achieve this balance is not an easy task. The problem is further complicated when the program has to assume the exchange rate risk on foreign loans and the rates of devaluation and of inflation differ a lot.

A microenterprise credit program will be viable to the extent to which it offers high-quality services. An entrepreneur is interested not only in sufficient purchasing power from the loan; he also wants the funds to be timely disbursed, the loan procedure to be easy and flexible, the amortization schedule to adequately correspond to his cash flow, and the loan term to be sufficiently long. All of this determines the quality of service.

It is not always easy to establish creditworthiness. For this purpose what is most important is for the lender to acquire enough information about the borrower, in order to be able to estimate the probability of lack of repayment. This information is accumulated through experience and a continued relationship with a particular client. Once his reputation as a good borrower has been established, the client protects it, since it is a valuable intangible asset. This asset is more valuable if the credit program is permanent rather than transitory. The viability of the program depends upon this perception.

The borrower also expects the program to be reliable; the expected losses from lack of access to credit when this is needed, such as during an emergency, can be high. Untimely service may also cause additional costs for the producer. The more complete the service, such as in a "financial supermarket," the greater the convenience and the less the cost for the client. There are many advantages for the client from both holding his deposits and conducting his credit transactions at the same institution. The client's first interest, there-

fore, is a solid and viable institution with which to develop a long-term financial relationship. This is, indeed, the nature of his implicit contract with the informal moneylender. Microenterprise credit programs have much to learn from informal lenders.

The viability of a microenterprise credit program is strengthened if it offers low-cost services. This does not mean that interest rates must be kept at artificially low levels. What is the value of too low an interest rate, if the loans are disbursed several months later, when they are not needed any longer, or if the institution does not authorize the expenditures that the producer wants? What is the value of an artificially low interest rate, if it decapitalizes the organization to the point that it has to drastically reduce the amounts that it can lend? What is the value of subsidized credit, if the client can get it this month but not the next?

It becomes necessary to recognize that, in order to be able to offer high quality services, microenterprise credit programs need adequate operation margins. It is necessary to recognize, as well, that poor quality services impose additional costs on the client, that make credit even more expensive. Delayed loans reduce the profitability of his productive activities. Cumbersome procedures waste his time and effort. What seems cheap turns out to be expensive.

The provision of financial services is never cheap. What matters, for the microentrepreneur's production and investment decisions, is the total cost of the funds. Interest rates are only a portion of these costs, frequently not the most important. There are other implicit costs, such as the opportunity cost of the time spent in the transaction or the losses due to delays in the disbursement of the funds. There are legal expenses, commissions, accounting statements, feasibility studies, taxes, travel costs, and bribes. When these other

costs are high, loans are expensive. These costs beyond interest payments tend to be particularly high in the case of small credit transactions.

What matters for the credit program is a financial margin that covers the costs of funds mobilization and the costs and risks of lending and that leaves a profit that allows for growth. A program that is not profitable, stagnates, and if it makes losses, it shrinks and it disappears. Intermediation margins would need to be excessively wide, however, when there is not a vigorous loan collection, since this forces the financial institution to accumulate reserves in order to avoid decapitalization. In addition to a greater operational efficiency, in order to reduce the cost of credit, a reduction of delinquency is thus necessary.

III. The IDB Microenterprise Programs

The viability of four implementing agencies for microenterprise credit programs sponsored by the Inter-American Development Bank (IDB) is explored in this paper, in order to determine the importance of several factors that may influence the programs' ability (or lack of it) to offer permanent and reliable services to their clientele and in order to obtain lessons of general interest from these specific experiences. The four programs studied are associated with:

(a) the Fundacion Paraguaya de Cooperacion y Desarrollo (FUPACODE)[7];

(b) the Fundacion Santo Domingo, in Colombia, previously known as Fundacion Barranquilla;

(c) the Fondo Mixto para el Fomento Industrial de Michoacan (FOMICH), Mexico[8], and

(d) the Asociacion para el Desarrollo, Inc. (APEDI) in the Dominican Republic.[9]

All of these microenterprise programs received loans from the IDB during the 1980s. For the purposes of this paper, fragmentary and unconfirmed information was obtained from documents and several other sources available at the IDB (ORE). These data were originally prepared for various other purposes and did not necessarily conveyed the information that was required for a proper institutional and financial evaluation. Although this is, there-

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[7] Paraguayan Foundation for Cooperation and Development.

[8] Mixed Fund for Industrial Promotion in Michoacan.

[9] Development Association.

fore, the most important limitation of the present study, interesting observations and a few generalizations have been possible.

On the basis of the partial and limited information available, several lessons were learned about the probabilities of success and institutional viability of microenterprise credit programs in Latin America. These lessons, reinforced by evidence available from similar programs, are summarized below. Brief descriptions of the outcome of the evaluation of each program are provided in the following chapters.

3.1 Data on the Intermediaries

It appears that the IDB has made significant efforts to have the implementing institutions create data sets about their individual borrowers. Loan agreements have required the executing agencies to keep detailed information and to regularly report on the borrowers' performance and characteristics. This is both expensive and possibly unnecessary to evaluate the impact of the program. Heterogeneous small borrower characteristics in a dynamic environment are difficult to measure and to accurately record. The evolution of the small enterprise is subject to too many influences for this method to be cost effective. Sample surveys may be sufficient for these purposes.

The generalized absence of adequate information on the performance of the implementing agencies has been, on the other hand, surprising, given the importance of good data for institutional viability and the success of the programs. Most of the reports required by the IDB about the implementing agency itself essentially deal with the progress of loan disbursements. This emphasis on disbursements has characterized most subsidized, borrower-dominated donor programs not sufficiently interested in viability. It has reflected a

failure to use data as a management tool. It is important for the IDB, however, to establish a uniform system of reports about the performance of the implementing agencies, in order to monitor the financial and operational performance of these intermediaries.

At a minimum, guidelines should be established about the certification of financial statements by auditing firms and about acceptable measures of delinquency.[10] The following are examples of adjustments that may be necessary:

(i) Financial statements are usually presented on an accrued rather than on a cash basis. Although this standard procedure captures important elements of an intermediary's performance, it is important, however, to incorporate information about the actual cash realizations of some of the accounts. This is particularly important in the case of the income statement, because interest payments represent the main source of revenues for the program. Accrued interest payments are usually greater than actually received interest payments. Thus, an income statement on an accrued basis overestimates the organization's viability when loan delinquency is present and actual interest revenues are less than shown in the statement.

To have information about actual interest and amortization payments received provides an early signal and a better measurement of portfolio delinquency. This is so because the amount of money that should have been received can be contrasted with the actual payments. That is, one can observe the ratio of actual payments with respect to amounts due.

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[10] The financial statements of the four programs, although correct from an auditing perspective, were prepared following different methodologies (e.g., cash versus accrued), contained different sets of data, and were deficient in reporting delinquency.

The indicator of delinquency used by the IDB-sponsored programs, on the other hand, is the ratio of installments in arrears divided by the total credit portfolio. This is insufficient in order to determine the extent of repayment problems in the program. First, the IDB indicator underestimates delinquency problems during the initial stages of the credit programs, when corrective measures are precisely more important, because as borrowers become delinquent, in those earlier stages their overdue payments are a small fraction of the total growing portfolio.

Second, measuring delinquency as the ratio of overdue payments with respect to the total portfolio ignores other manifestations of repayment problems, such as the rescheduling of overdue loans, repayments after a period of arrears, or the importance of loans under legal collection. More detailed and accurate data on repayment are extremely important.

(ii) In those cases where the microenterprise programs combine credit and other components, such as training, reporting methods should accurately assign each activity their operational income and costs. This represents the only way in which a meaningful efficiency analysis can be performed. Implementing organizations and donor agencies should be able to quantify operational results, in order to establish the viability of each individual component of the program, so as to know the exact opportunity cost of their non-financial activities and the magnitude of the cross subsidization involved.

3.2 Objectives of the Organization

The analysis of the four case studies indicates that a microenterprise credit organization is more likely to succeed if it presents the following characteristics:

(i) The organization shows a strong desire for self-sufficiency and growth, reflected by its recognition of the value of money and of the risks associated with credit operations. This recognition results in sound financial policies, which have as their objective the sustainability of the organization, as opposed to channelling subsidies during a short period of time to a low number of microentrepreneurs.

(ii) The organization is completely specialized in the provision of credit services (minimalist approach). This should be contrasted with other organizations that attempt to serve different types of beneficiaries with many services for each type.

It seems that more flexible and specialized organizations are better vehicles for credit programs. This is because management is more focused on detecting eventual problems and in determining relevant changes that need to be made. Such organizations are able to react in a much quicker fashion to changes in their environment and to new opportunities for growth. That ability to react with agility is a vital component in the success of a financial intermediary, particularly in an inflationary and unstable macroeconomic environment, such as in most Latin American economies during the 1980s.

3.3 Inflation and Interest Rate Policies

The implementing agencies must be allowed maximum flexibility in the determination of their interest rate and other pricing policies. This has not always been the case with the IDB-funded programs, however. Frequently, the interest rates to be charged have been fixed by the terms of the loan agreement, leaving no room for timely adjustments, even in countries with high inflation rates. When this has been the case, the implementing organizations have become decapitalized and unable to fulfill their purposes.

There is no reason for the implicit fears that, left to themselves, the microenterprise credit programs will charge exhorbitant interest rates. Rather, they will have to be encouraged to charge sufficiently high rates and to make frequent revisions of those rates a regular practice of their financial management decisions. As in any other economic activity, a high sensitivity to price signals is a precondition for success.

Similarly, there is no merit in the generalized practice of rigidly assigning components of the interest rate spread for specific purposes. Although minimum allocations for certain purposes must be encouraged, the determination of the appropriate margins and of their optimum allocation are also typical managerial decisions.

3.4 Portfolio diversification

Diversification is one of the cornerstones of a successful credit program. This is particularly important when dealing with a clientele such as microentrepreneurs, who have a fragile source of income. A problem that might represent a flu for one established firm, could be a deadly pneumonia for a microentrepreneur. Project design should avoid, therefore, concentrating loans on homogenous borrowers and should allow the implementing intermediaries to diversify their portfolios. If one single event, short of a tragedy or natural disaster, can significantly reduce all of the borrowers' ability to pay, then diversification of the portfolio had not been achieved. This might be one of the causes of FOMICH's high delinquency rates, given the decrease in tourism to Michoacan and the failure of the handicraft marketing agent LACASA. Diversification is particularly important when lending to microenterprises because of the fragility of these businesses.

3.5 Viability and exchange rate risk

In the four case studies, the IDB assumed the foreign exchange rate risk on the loans to the implementing agencies. This was a critical and positive decision for the viability of these organizations. Had they assumed this risk, the resulting losses would have eventually caused their financial collapse. For example, the eventual losses would have amounted to 381.9 million pesos, up to December, 1990 in the case of Fundacion Barranquilla. In the case of APEDI, these potential losses, amounting to 7.6 million pesos, would have caused the organization's insolvency. At the current exchange rates, APEDI's debt with the IDB would represent 2.5 times the institution's assets and 16.5 times its equity.

Most Latin American countries have experienced significant exchange rate instability during recent years. Clearly, exchange rate losses would have been incurred if the implementing organizations would have been asked to keep liabilities denominated in a foreign currency, while their financial assets were all denominated in domestic currency and when the interest rates charged to the final beneficiaries do not include a premium for this risk.

The presence of a foreign exchange rate risk is a difficult issue in microenterprise credit programs. The key question is: which one of the parties involved in the program should bear those risks? Such parties include the donor agency funding the program (IDB), the governments of the countries where the programs are carried out, the implementing organizations (and sometimes a financial intermediary, as well), and the final beneficiaries of the programs.

Donor agencies will experience reductions in their capital if they assume the exchange rate risk. This reduces their ability to support other programs in the future. Some governments have assumed the exchange rate risk associated with similar programs through their central banks. Such a procedure has generated operational losses for the central banks that, as part of their deficits, have increased inflationary pressures. When the losses are large, the resulting instability may more than offset the intended benefits of the programs. In addition, when governments treat those potential foreign exchange losses as direct transfers to particular groups, rent-seeking and political patronage and intrusion are likely to negatively affect the viability of the programs.

To hedge against these risks, the implementing organizations may transfer the risk to their borrowers, through some sort of indexed credit contract, so that interest and amortization payments increase as the local currency is devalued with respect to the currency in which the organization's liabilities are denominated. The consequence of this is that only borrowers with activities whose returns are highly responsive to exchange rate variations would successfully pay back their loans. Microenterprise activities, unfortunately, tend to be highly concentrated in the production of non-tradable goods and services. The resulting interest rates may become too high, therefore, during periods of exchange rate instability. If rates of devaluation are higher than the domestic inflation rate, when the other components of a sound interest rate are added, the resulting cost of borrowing from the organization may become too high and may even lead to severe adverse selection problems. That is, only borrowers who do not intend to pay or those with extremely risky projects will demand credit from the organization at those interest rates.

The absence of foreign exchange rate risk or its adequate management is a vital ingredient in the success of a microenterprise credit program. Unfortunately, there is no panacea in this case. The IDB's decision to assume this risk protected the institutions' viability in these four cases. An obvious recommendation, however, is that credit programs should have as much local funding as possible, in order to minimize these problems. This objective can only be achieved if the organization mobilizes domestic resources in the form of savings accounts or if it acts as a retailer of wholesale funds borrowed from local banks, denominated in domestic currency. FUPACODE in Paraguay is a good example of the latter strategy.

IV.
Paraguay

Fundación Paraguaya de Cooperación y Desarrollo: FUPACODE

A. The Organization

Fundación Paraguaya de Cooperación y Desarrollo (FUPACODE) was established in February, 1985 as a non-profit organization. Its objective has been to promote the social and economic wellbeing of the microentrepreneurial community of Paraguay.

B. The IDB-FUPACODE Program

In July, 1987 the IDB granted FUPACODE a loan for Sw.Frc.780,750 (equivalent at the time to US$500,000), funded by the Small Projects Program. The purpose of the loan was to assist the Foundation in providing credit to low-income Paraguayan microentrepreneurs. The IDB donated FUPACODE a Sw.Frc.140,535 (US$90,000) grant, in order to improve its training programs for microentrepreneurs and to strengthen the Foundation's operational capability.

The conditions of the IDB loan to FUPACODE were the following:

(1) Amount: Sw.Frc.780,750, equivalent to US$500,000 at that time.

(2) Currency of Repayment: FUPACODE's debt is denominated in Paraguayan Guaranies. As a result, the IDB assumed the foreign exchange rate risk associated with the loan.

(3) Terms of Repayment: The term of the loan is 40 years. FUPACODE is expected to cancel the loan through 60 equal bi-annual amortizations, starting after a ten-and-a-half years grace period.

(4) Financial Cost: The IDB charges a 1 percent annual commission fee to FUPACODE on the outstanding balances of the loan. There are no other interest charges on the loan.

Originally, FUPACODE agreed to use the IDB loan funds to provide credit to microentrepreneurs, under the following conditions:

(1) Term Structure: The term for repayment available to the microentrepreneurs was originally based on the declared purpose of the loan. Working capital loans were assigned from 3 to 12 months, while fixed capital investment loans were allowed a repayment period of up to 24 months.

(2) Amounts of Credit: The amounts of credit available for each borrower have been between US$200 and US$3,000 (equivalences in Guaranies).

(3) Amortization: Loans are to be paid with monthly amortizations.

(4) Interest Rate: It was agreed that the interest rate charged on loans to microentrepreneurs would be based on the following criteria:

(a) the interest rates prevailing in the country for similar borrowers;

(b) the IDB's guidelines about similar credit programs; and

(c) the domestic inflation rate in Paraguay.

At the beginning of the program in 1987, the interest rate charged to the beneficiaries was set at 35 percent per year on the outstanding balances. Since then, FUPACODE has made significant interest rate adjustments.

FUPACODE agreed to use the spread between the interest rate it charges to its borrowers and the one percent commision fee charged by the IDB as follows:

(a) one-half of the spread to finance the program's operational costs;

(b) five percent of the portfolio to create a reserve for bad loans; and

(c) the remaining revenue from interest payments to increase the amount of funds available for credit.

An interesting aspect of the implementation of this program was that, prior to the first disbursement of the funds, the IDB sent a team of five experts to review and help improve FUPACODE's organizational capability. The team's efforts focussed on financial planning, training programs for microentrepreneurs, credit allocation, and accounting systems.

Finally, the program design required FUPACODE to hire the services of a financial intermediary, in order to disburse and collect the loans granted with the IDB funds, but this never took place.

C. FUPACODE's Relationships with other Donor Agencies and Banking Institutions

One important characteristic of FUPACODE's development have been its intense relationships with several international donor agencies. Besides the loan and grant from the IDB, in the period between February, 1985 and December, 1989 FUPACODE received US$1,602,489 in grants from the following agencies:

(a) the United States Agency for International Development (USAID),

(b) the Interamerican Foundation (IAF),

(c) the United States Peace Corps,

(d) the Center for International Private Enterprise (CIPE),

(e) the United Nations Development Program (UNDP), and

(f) Accion International.

These grants have directly supported FUPACODE's operational expenses and have increased its lending capability to service microentrepreneurs.

On the other hand, by December, 1989 FUPACODE had received 204.3 million Guaranies (US$371,363) in loans from five banks operating in Paraguay. The weighted average interest rate on those loans was 23.7 percent per year. In addition to such actual disbursements, FUPACODE had 400 million Guaranies (US$727,272) of approved credit lines with two of those banks. The weighted average interest rate on those operations was 21 percent per year. Most of the loans were extended with a guarantee offered by a New York bank. This bank had, in turn, USAID's fiduciary guarantee. That is, USAID acted as guarantor before the New York bank and the latter acted as guarantor before the local bank. The Agency paid for the financial charges of the operation.

It is interesting to point out that these private bank loans were received by FUPACODE while a good portion of the IDB loan was not yet fully disbursed, despite the fact that the financial cost of these transactions has been considerably higher than for the IDB loan.

Contrary to the case of some of the other institutions under study, the IDB's assistance to FUPACODE has been relatively small, when compared to the total contribution of other agencies. In effect, the IDB's US$90,000 grant for operational support represented only 5.2 percent of the total assistance received by FUPACODE for that purpose up to 1989. The amounts of the loan disbursed by the IDB up to that date represented 37 percent

of the Foundation's total loan portfolio. This program has thus successfully practiced diversification of its liabilities as a mechanism to protect its viability.

D. Institutional Evolution

FUPACODE has experienced impressive rates of growth since its creation in 1985. Moreover, its evolution has not only been characterized by such rapid quantitative growth, but also by an equally impressive ability to adapt and undertake organizational and methodological adjustments when necessary.

1. Financial Evolution

FUPACODE's growth has been substantial. Tables 1 and 2 show the behavior of the Foundation's balance sheet since it was created. As shown, FUPACODE increased its total assets from 17.5 million in 1985 to 533.7 million Guaranies four years later, by the end of 1989. This 30-fold multiplication of its size in nominal values corresponds to rapid real growth as well. In Guaranies of constant 1985 purchasing power, the size of the organization increased from 17.4 million to 222.6 million. This growth represented an increase of 12.7 times in four years. On the other hand, in real terms, the Foundation's equity grew from 15.5 million to 99.4 million of constant 1985 Guaranies. This represented an increase of 6.4 times during the same four-year period.

The real growth of assets and equity has been a consequence of several factors. With respect to equity, it has basically resulted from the grants received for the credit fund and, to a lesser extent, from savings made by the organization on operational grants, due to its increasingly high levels of self-sufficiency. On the other hand, the growth of assets has been

due both to the growth of equity and to FUPACODE's increased leverage levels. It is evident that FUPACODE has been very successful in securing numerous and diverse sources of assistance, thereby decreasing its dependency on one single institution or donor.

Table 1: FUPACODE: Comparative Balance Sheet for Selected Years (thousands of Guaranies)

	1985	1986	1987	1988	1989
Assets:					
Short term	4,491	23,764	136,664	247,268	518,927
Permanent/long term	12,998	65,306	18,820	24,515	34,724
Total Assets	17,490	90,757	155,484	271,784	533,659
Liabilities:					
Short term	n.a.	n.a.	57,938	122,994	202,712
Long term	n.a.	n.a.	---	35,209	103,843
Total Liabilities:	1,956	16,927	57,938	158,195	306,555
Equity:	15,534	73,829	97,545	113,588	247,096

Tables 2 and 3 show that, over time, FUPACODE's balance sheet has begun to look more like the accounts of a financial intermediary, which it is, and less like those of a charitable organization, with only equity and no liabilities. The reason has been that its liabilities have become increasingly important as a proportion of its total assets. The same trend has been reflected by FUPACODE's income statements. This trend has both reflected and reinforced desires for self-sufficiency.

Table 2: FUPACODE: Evolution of Total Assets and Equity in Real Terms
(Thousands of constant 1985 Guaranies)

	1985	1986	1987	1988	1989
Total Assets	17,490	68,912	96,875	137,969	222,618
Equity	15,534	56,058	36,098	57,658	99,355

It is clear that FUPACODE has been increasingly resorting to debt instruments in order to finance its credit operations. The leverage indicators presented in Table 3 show, however, that FUPACODE has still a long way to go before it exhausts its borrowing capacity. Given FUPACODE's on-going relationships with local banks, its strong equity base and interest rate policies, it seems that the organization should be able to sustain these high rates of growth for a long time.

Table 3: FUPACODE: Leverage Indicators
(Percentages)

	1985	1986	1987	1988	1989
Liabilities/equity	12	23	59	139	124
Equity/assets	88	81	63	42	44
Debt's contribution to total assets	12	19	37	58	56

The increased size of the organization has already spilled over to its beneficiaries, in terms of the number of loans extended and of the amounts of credit available. This is shown in Table 4. FUPACODE multiplied its real loan balances 99 times from December, 1985 to March, 1990. The average annual rate of growth of its real loan portfolio was 52 percent during that period. The number of credit operations disbursed every year increased dramatically, as well. In 1989, FUPACODE extended 2,592 loans to its beneficiaries, 4.3

times more than in 1986. These 2,592 operations in 1989 represented an average of 10 loans per working day.

Table 4: FUPACODE: Loan Portfolio Balances and Number of Operations (Thousands of Guaranies)

	1985	1986	1987	1988	1989	1990[a/]
Nominal Loan Portfolio Balance	2,198	51,810	103,992	138,886	276,958	594,375
Real Loan Portfolio Balance[1/]	2,198	39,339	64,792	70,145	119,224	200,667
Real Portfolio Change (Percentages)	n.a.	1,689	64.7	8.3	69.3	68.3
Annual Number of Disbursed Loans	n.a.	603	1,607	2,071	2,592	4,000[b/]

1/ In 1985 constant Guaranies.
a/ Refers to March, 1990.
b/ Estimated by ORE.

2. Efficiency and Sustainability

The growth of the organization has been accompanied by an increase in its administrative staff. The number of full-time employees in FUPACODE's payroll increased from 13 in 1987, to 30 in 1988, and 44 in 1989. The average increase in personnel during the period has been less than the average increase in operational activity. It seems, therefore, that FUPACODE's activity growth has been matched with increased efficiency, as economies of scale have been reaped. This topic will be further pursued below, where computerization and credit approval systems are analyzed.

The growth in loan portfolio and apparent increase in efficiency have implied that FUPACODE's level of self-sufficiency has improved with time. This is shown in Table 5.

Table 5: FUPACODE: Self-Sufficiency Indicators

	1985	1986	1987	1988	1989
Ratio of Operational Revenues to Expenses (Percentages)	0.10	16.8	54.4	87.0	85.4
Real Operational Revenues[1/]	8.5	5,881	38,260	65,528	75,541
Real Operational Expenses[2/]	7,221	34,913	70,347	72,725	88,423

1/ Thousands of constant Guaranies of 1985.
2/ Includes bad loan write-offs.

Operational revenues include income from interest payments on loans, training services, and administrative charges to borrowers. Operational expenses are based on what the auditing firm Coopers and Lybrand considers to be expenses directly related to those income-generating services. It should be noted, however, that operational expenses might be overestimated, due to the fact that FUPACODE received significant grants to cover the operational expenses of programs funded by international agencies. It would appear that those programs were cross-subsidizing each other since, for example, in 1989 the total amount received for that purpose was 248.5 million Guaranies and the combined total expenses were only 213.6 million. This implies that FUPACODE saved 34.9 million Guaranies when carrying out those programs with their own separate budgets. It is impossible to quantify the amount of subsidization from those programs to FUPACODE's regular operations. This would require an extensive on-site analysis of its operations, in order to precisely appraise the expenses for each one of FUPACODE's activities.

On the other hand, the accounting methods used by the organization record interest income as it is accrued, instead of when it is actually received. This could certainly overestimate interest income and, thereby, operational revenues, if delinquency is significant. However, delinquency does not appear to be a serious problem in FUPACODE's case. Arrears represented about 10 percent of the portfolio in 1987 and 1988. In 1988 and 1989, FUPACODE wrote-off from its loan portfolio 6 million and 6.6 million Guaranies, respectively. This operational expenditure represented 4.3 and 1.1 percent of the total loan portfolio for those years.

Writing-off loans, regardless of the age of the arrears problem, is a fairly uncommon accounting policy for this type of organization. In FUPACODE's case, it seems to be a very good signal about the willingness of the organization to report an accurate picture of its financial situation. Such delinquency rates and loan write-offs do not pose a threat to the financial health of the institution. This is because, as of December, 1989 the Foundation had already created a reserve for bad loans of 12 million Guaranies. Note that such a reserve was created in addition to writing-off bad loans. Even more importantly, still considerably higher levels of delinquency would not immediately harm FUPACODE's financial situation. This is because FUPACODE's interest rate and pricing policies are aimed at protecting its balance sheet and to achieve not only self-sufficiency, but growth in real terms.

3. Services

FUPACODE's scope of services is limited to training and credit for microentrepreneurs. The educational component is very simple and consists only of one class taught by

a member of the staff the same day the loans are disbursed. Loans are for small amounts, sometimes as low as the equivalent of US$40. Very few loans are above US$2,000. Most loans are repaid by weekly installments and have a relative short duration (from 2 to 4 months). In almost all cases loans are given to groups of borrowers, including married couples. Each member of the group acts as a consigner, guarantor for the other members' obligation.

From the first contact with the microentrepreneur, the disbursement of the first loan takes from 2 to 3 weeks. Thereafter, additional loans depend on the punctuality of payments of the current loan. Increasing amounts of credit are extended after the complete repayment of past loans. Credit approval decisions are made by a staff member who manages a portion of the portfolio and who has pecuniary incentives, based on loan delinquency, to evaluate creditworthiness. The credit allocation system seems to be very expeditious and cost effective. Note that in the original design of the IDB project, loans were supposed to be approved by a five-member credit committee. That design required, in addition, the traditional paperwork for credit applications. These favorable procedure changes undertaken on FUPACODE's initiative were fortunately approved by the IDB.

4. Pricing Policies

FUPACODE's pricing policies do not make any distinction between credit and training services. Actually, all of its operating revenues come from interest payments. The total cost of borrowing from FUPACODE in 1989 was determined as follows:

(a) a 3 percent monthly flat payment on the principal amount as interest; and

(b) a 3 percent monthly flat payment on the principal amount as charges for training and follow-up services.

Training charges have been thus calculated on the basis on the amount of the loan and not on the actual training services received by the borrowers. They represent, therefore, another interest payment, rather than a fee for training. The IDB program borrowers have been charged 3 percent interest per month on outstanding balances, instead of the 3 percent flat rate.

It is clear that the Foundation's pricing structure is essentially equivalent to a 6 percent monthly flat interest charge. This 6 percent flat rate is, in turn, considerably higher than the equivalent rate resulting from payments based on the outstanding balance of the loan. In short, FUPACODE has been charging an effective interest rate of more than 72 percent per year. Indeed, the organization received a return of 74.7 percent on its average portfolio in 1989. This suggests that delinquency has been very low.

Given an annual inflation rate of 28.7 percent for 1989 in Paraguay, FUPACODE's 72 percent charges were equivalent to a real interest rate of more than 33.6 percent per year. Those rates are still considerably lower than the rates Alicia Pfund found were being paid by microentrepreneurs to moneylenders. In the sample, such rate were on the average 218.4 percent per year. This explains the high demand for loans faced by the Foundation.

One consequence of this policy is that FUPACODE is protecting itself against inflation. Thus, FUPACODE's self-sufficiency, sustainability, and real growth problems are reduced to the adequacy of its intermediation spread and the size of its portfolio. Since the rate of delinquency is relatively low and the operational costs reported by FUPACODE

seem reasonable, the organization should be able to attain complete self-sufficiency and real growth by simply increasing its credit portfolio. This would be true even if FUPACODE had to borrow all of the additional funds at rates similar to those it was paying in 1989 to the domestic commercial banks. This assumes that the organization would be able to allocate this additional credit at similar rates and risk levels, which is a reasonable presumption.

FUPACODE's most imminent threat resides in attempting to maintain the programs whose budgets are covered by international donors after those agreements expire. It should be noted that in 1989, the organization received 248 million Guaranies as grants for such purposes.

5. Organizational Evolution

FUPACODE appears to be a very dynamic organization, that in a period of just four years (1985-1989) made important adjustments and improvements in its organization. The following are some noticeable examples of its flexibility and ability to improve:

(a) FUPACODE kept changing its credit approval and disbursement procedures, until it achieved what appears to be a highly expeditious and cost-efficient system;

(b) in 1989, FUPACODE initiated a process to expand its geographical scope, when it opened three new branches in that year;

(c) in 1989 the Foundation completed the process of computerizing its organizational activities; and

(d) FUPACODE has established very sophisticated and modern techniques for training and evaluating its personnel.

E. Lessons Learned and IDB Project's Impact

There are several important lessons to be learned from the apparent high success experienced by FUPACODE.

(1) The organization has shown a strong desire for self-sufficiency and growth, reflected by its recognition of the real value of money and the risk associated with credit operations. This has resulted in sound financial policies that have had as their objective the sustainability of the organization, as opposed to channelling subsidies during a short period of time to a low number of microentrepreneurs.

(2) The organization is completely specialized in its credit services. This should be contrasted with other organizations that attempt to serve very different types of beneficiaries, with many services for each type.

(3) FUPACODE has been very successful in rallying several donor agencies in its favor, which has decreased its dependency on just one of them. This seems to have allowed the organization to approach problems in its own way, without having to conform to one single donor's view. FUPACODE has managed to develop a set of policies and procedures of its own despite links to many donors.

(4) Much of the assistance received by FUPACODE has had as its objective to increase its local borrowing capability. This has been achieved by granting an initial amount of capital (leverage base) and then helping the organization to borrow from local intermediaries, with the donor agency acting as a guarantor. As a result, FUPACODE has established financial relations with several local banks.

It is easy to expect that as a consequence of FUPACODE's success, those banks would lend in the future without requiring such guarantee. The intermediation from traditional commercial banks to microentrepreneurs is feasible only because FUPACODE has been able to borrow at rates consistent with traditional banking operations and to lend at rates consistent with the nature of the microentrepreneurs' activities (i.e., at high real interest rates). Once donor agency programs expire, FUPACODE could borrow as wholesaler and lend as retailer, achieving financial independence from international donors. In fact, such mechanism could be, from the intermediaries' perspective, a relatively close substitute to savings mobilization. Unfortunately, that does not solve the problem of lack of access to deposit services for the microentrepreneurs.

(5) The absence of foreign exchange rate risk has been fundamental for the organization's performance. Had FUPACODE been exposed to such risks, it would probably be insolvent by now.

(6) FUPACODE shows a highly decentralized and flexible administrative structure.

(7) The Board of Directors seems to be highly involved in the organization. In 1989, they assumed personal responsibility as guarantors (cosigners) for a US$30,000 loan received by FUPACODE.

(8) Most donors (including the IDB) did not expect the organization financial spreads to cover particular "charitable" programs. Those programs were provided for with independent budgets.

Finally, it is apparent that the IDB program had a positive impact given items (4), (5), and (8) above. In particular, it was interesting how the IDB provided technical assistance before disbursing the first loan. More importantly, it seems that the IDB allowed, after the design of the project, FUPACODE to set its own pricing policies and conditions on loans. This flexibility on the part of the IDB saved FUPACODE's viability.

V.

Colombia

Fundación Santo Domingo

(Previously Known as Fundación Barranquilla)

A. The Organization:

Fundación Barranquilla (FQA) was established as a non-profit organization in April, 1960 by the city's business leaders. Its objective has been to increase the welfare of Barranquilla's population, by creating and supporting educational, cultural, and charitable organizations. FQA did not have any experience as a financial intermediary until 1982. In that year, it began a program to support local microentrepreneurs with a very small credit component.

B. The IDB-FQA Program:

In 1984, the IDB granted a loan to FQA for Sw.Frc.1,064,500 (equivalent at the time of US$500,000). The loan was funded by IDB's Small Projects Program and its purpose was to assist FQA to implement a training, technical assistance, and credit project to benefit Barranquilla's microentrepreneurial community. The specific purpose of the loan was to finance the project's credit component.

The following are the conditions of the IDB loan to FQA:

(1) Amount: Sw.Frc.1,064,500, which at the time of approval of the operation were equivalent to US$500,000.

(2) Currency of disbursement: Swiss Francs.

(3) Repayment Currency: The payments from FQA to IDB should be made in Colombian Pesos. The IDB assumed the foreign exchange rate risk.

(4) Term of Repayment: The term of the loan is 20 years after the agreement was signed (June, 1984). FQA is expected to cancel the loan with 20 equal bi-annual amortizations beginning in December, 1994.

(5) Financial Cost: The IDB charges a one percent annual commission fee to FQA on the outstanding balances of the loan.

FQA used the IDB loan to create a credit fund for microentrepreneurs. The following are the general condition under which FQA has extended these loans:

(1) Interest Rate: 23 percent per year.

(2) Term of Repayment: 50 percent of the credit operations at 12 months and the remaining 50 percent at 36 months.

Credit recuperations should be used to extend further credit to the program's beneficiaries. Finally, FQA agreed to use the 23 percent annual interest income generated by the IDB loan as follows:

(a) the IDB's commission	:	1 percent
(b) the financial intermediary's commission	:	3 percent
(c) operational expenses of the credit program	:	12 percent
(d) loan write-offs	:	2 percent
(e) credit program growth	:	5 percent
Total interest income		23 percent

The 3 percent corresponding to the financial intermediary's commission refers to payments from FQA to a local intermediary, hired to disburse and collect loans. FQA still promotes, supervises, and analyzes credit applications.

Credit operations represent only one of the dimensions of this program. Besides credit services, the program has a strong component of training for microentrepreneurs. On the other hand, the credit process itself requires a great deal of effort on FQA's part, because its staff have to elaborate investment plans and a financial analysis for each loan.

C. Financial Impact on FQA

1. The Effects of Inflation:

The IDB-FQA agreement forces the foundation to extend credit to microentrepreneurs at a rate of interest of 23 percent per year, while the agreement states the expected uses of the income generated by the program. Project design thus allocated, for annual operational expenses and growth of credit portfolio, the amounts shown in Table 1.

Table 1: Fundacion Barranquilla: Margin Allocations

Item	Proportion of Loan Portfolio	Amount (Colombian Pesos)
Operational Expenses	12%	10.4 million
Growth of Credit Portfolio	5%	4.36 million

Table 2 shows the annual rates of inflation experienced by the Colombian economy since the beginning of the IDB program. They imply that in August, 1990 it was necessary

to spend 4.25 pesos to purchase goods and services that in June, 1984 had a price of one pesos.

Table 2: Columbia: Variations in Consumer Prices (CPI, June 1984:100)

	1984	1985	1986	1987	1988	1989	1990*
Annual CPI	109.2	133.5	172.2	213.5	273.7	350.4	425.9
Rate of Change	18.3	22.3	29.0	24.0	28.2	28.0	32.3

Source: IMF, International Financial Statistics, February, 1991.
* As of August, 1990.

Under the most optimistic assumptions, the originally estimated 5 percent annual rate of nominal growth for the credit portfolio would have implied an accumulated growth of 36.6 percent during the same period. That would have caused the credit portfolio to grow to 119.1 million pesos. Even if that would have happened, which is doubtful, inflation would have reduced this amount to 38 million of constant 1984 pesos. In short, even under otherwise optimal conditions, the purchasing power of the IDB loan would have been eroded by inflation to almost one third of its initial amount. Unfortunately, the credit portfolio did not grow at the estimated rates and, as a result, the contraction of the portfolio has been even more dramatic than suggested by these estimates.

The average size of the loans extended by FQA has increased significantly, in nominal terms, as shown in Table 3. The average size of a loan granted in the first semester of 1988 (573,933 pesos) was 2.7 times greater than loans disbursed in the second semester of 1984. As a result, the real size remained more or less constant. This clearly implies, however, that as inflation took place, fewer microentrepreneurs had access to the IDB credit

program, since the real value of the total portfolio declined and the average loan size tended to increase.

Table 3: Fundacion Barranquilla: Average Amount of Credit Granted, 1984-1988
(Colombian Pesos)

1984	1985	1986	1987	1988
196,024	215,095	246,875	371,900	513,933

The IDB-FQA loan agreement assigned 10.4 million pesos per year to cover the program's operational expenses. This amount corresponds to 12 percent of FQA's credit portfolio. Those operational expenses result from payments to resources such as personnel and other services. The price of these resources tends to adjust rather quickly to changes in price levels. The problem is that, while operational expenses increase with inflation, the revenue budgeted to cover them remains fairly constant. For instance, if FQA devoted the 10.4 million pesos exclusively to the payroll of the 18 people who work in the program, the corresponding average salary would be US$84 per month, at the 1990 exchange rate. One would expect that actual salaries are much higher. In fact, the corresponding average at the beginning of the program was US$697. In any case, payroll represents only a portion, although important, of total operational expenditures.

Again, it seems that FQA has to subsidize the program, because the amounts of revenue budgeted in the IDB agreement (and thus generated by the program) seem not to cover the current level of expenses. This means that the program is simply not self-sustain-

ing and, as a consequence, that it represents a source of operational losses to FQA. Clearly, this will reduce the intermediary's ability to provide services in the future. In many cases, such financial stress causes some intermediaries simply to disappear or to cut back in their services, as a consequence of a viability crisis resulting from excessive operational losses.

In FQA, this danger has been magnified, due to the credit approval system adopted according to the original design of the program. The following is a brief description of the process required to produce a single loan:

(1) FQA's employees identify and make contact with microentrepreneurs in Barranquilla. At that moment, a technical assistance process starts, during which a system of accounts is set up and, in general, the borrowing ability of the business is verified. This is a step prior to the elaboration of the actual investment project.

(2) If the investment project is judged viable by the FQA employee, then he and the beneficiary prepare the credit application. According to the rules established, the application should include, among other things, financial statements, investment plan, and a cash flow for the project. It is clear that, given the nature of FQA's clientele, its employees must devote a good deal of effort to each loan application.

(3) The loan application is reviewed by a committee of representatives of FQA, the Chamber of Commerce, and the financial intermediary. This means that people from three different organizations must get together in order to approve one loan.

(4) After disbursement, each operation should be supervised and technical assistance should be provided.

Evidently, this system represents a very expensive mechanism to allocate credit. According to the design of the project, these activities should have been financed during 20 years with an annual budget equivalent to 12 percent of a relatively fixed amount of nominal credit.

3. Delinquency

One worrisome signal about FQA's sustainability is the evolution of delinquency in its credit portfolio. Table 4 shows an steady tendency of delinquency to increase. In fact, the decrease shown from June, 1987 to December of the same year resulted from loan write-offs for 1.7 million pesos. It seems that the assumptions made in the IDB loan agreement were not realistic, because an annual amount of only two percent of the loan portfolio was assigned to cover for delinquency losses.

Table 4: Fundacion Barranquilla: Evolution of Delinquency in the IDB Program

	DEC 84	DEC 85	DEC 86	JUNE 87	DEC 87	JUNE 88	DEC 89
Loans in Arrears (%)	1.8	5.4	6.2	7.7	5.1	5.2	12.4
Loans in Arrears and Legal Collection	1.8	8.0	10.2	12.4	8.4	9.1	n.a.
Loan write-offs ('000 Col$)	0	0	105.7	n.a.	1711.8	(75)	4,698
Loans in Legal Collection ('000 Col$)	0	804.0	2320	3087	2672	3408	n.a.

Note: Loans in arrears are measured as the proportion that due and non-collected amortizations represent of the total portfolio. Other delinquency indicators were not available.

Table 4 shows that, up to December, 1989 FQA had written-off loans for 4.7 million pesos, which does not represent in itself an alarming amount. However, the tendency of the variables presented in this table seems to indicate that the delinquency problem might increase in the future. The reasons for this are:

(a) The measure of loan arrears presented underestimates the problem, because it shows only the amount that should have been received at certain point in time. Experience with similar programs elsewhere tells that delayed payments for one operation evidence credit risk for the total amount of the loan. This is particularly important when loans have a relatively long term.

(b) Both loan write-offs and loans under legal collection show a tendency to increase. In microenterprise lending it is usually hard to collect loans through the legal system. This is because microentrepreneurs can easily hide their income. In FQA, an important proportion of its loan portfolio is not guaranteed with traditional collateral.

(c) In general, microentrepreneurs show more willingness to pay their loans when they have expectations of a constant and stable business relationship with the intermediary. Since FQA's real credit portfolio has shrunk significantly, some microentrepreneurs must be rationed out. If current borrowers are rationed out from loan renewals or from new operations or even if they are informed of such situation by others, they would lose an important incentive to pay their loans back.

3. The Use of a Financial Intermediary

The IDB program design included the hiring by FQA of a specialized financial intermediary, in order to perform the activities of loan disbursement and collection. The agreed payment for those services was set at an annual three percent of FQA's credit portfolio.

A priori this mechanism seems to be an interesting innovation because:

(a) Borrowers get the impression that they are dealing with a traditional financial intermediary, which would go to any extent to collect loans. This might reduce the ex ante expected level of delinquency.

(b) One should expect that a specialized and experienced organization can perform those tasks at a lower cost than a non-financial organization, such as FQA was before the IDB loan. If that is the case, it might be more attractive to pay for the services, instead of creating the necessary organizational structure to perform them.

Despite these apparent advantages, it seems that something did not work well in this particular case. This is because, in theory, loan collection was to be completely performed by the specialized intermediary. However, FQA does operate a collection department, which has, among others, the following functions:

(a) send due payment notices,

(b) keep information on overdue payments,

(c) perform delinquency analysis for individual operations, and

(d) recommend rescheduling, legal collection, or write-offs.

These are indeed the most important loan collection activities. It seems, then, that the financial intermediary only receives payments and issues receipts; it is merely a cashier. These are, on the other hand, low marginal cost operations. Clearly, there exists a duplication of functions between the intermediary and FQA, which turns out to be expensive, because FQA still pays three percent per year on its outstanding loans for a much reduced service.

It should be noted that, in general, the cost of loan collection for an established intermediary is much less than three percent per year of its loan portfolio. In fact, in markets with relatively high levels of competition, such as Colombia, that percentage is close to the spreads between cost of capital and return on assets enjoyed by banks and other established intermediaries.

The question that arises, therefore, is: What is the reason for such duplication of functions? The following are some elements that might contribute to a possible answer:

(1) Microenterprise loans are small. An intermediary faces equal cost of collecting a loan for one peso or for one million pesos. Therefore, managing a credit portfolio made up of small operations is expensive.

(2) In an inflationary environment, if liabilities and the credit portfolio increase in nominal terms as prices rise, a fixed percentage of these magnitudes, such as three percent, tends to represent a relatively stable amount in real terms. FQA's credit portfolio has remained relatively constant in nominal terms, however, at about 87 million pesos, which implies that a three percent per year of this amount represents a decreasing value in real terms.

(3) It seems that the contract between FQA and the financial intermediary does not provide with risk-sharing mechanisms. That is, all credit risk seems to be assumed by FQA. It is clear that, in a contract lacking such provisions, there are incentives to reduce the amount of effort on the part of the intermediary (moral hazard).

Given (1) and (2) it might be that the intermediary finds it unattractive to perform these loan collection activities. In fact, the intermediary could be expected to eventually stop providing the services, unless its remuneration is adjusted. Therefore, it might be the case that the duplication represents FQA's reaction to increased delinquency, due to the moral hazard behavior on the intermediary's part; or that it resulted from a renegotiation between the two parts. The latter case would mean an effective increase of the intermediary's payment by reducing its operational load, in order to compensate for inflation.

The lessons that must be learned from this duplication can be summarized as:

(a) In FQA's case, collection activities seem to be extremely expensive, because of the double cost (commission and operational expenses) it is incurring. This has negative consequences on the organization's viability.

(b) Underline, once again, the damaging effects that inflation, fixed nominal portfolios, and rigid interest rates policies have on organizations providing financial services.

4. The IDB Program's Impact

Table 7 provides the summarized information available from the FQA's consolidated income statement.

Table 7: Fundacion Barranquilla: Income Statement

	1987	1982
Total Income ('000 Col$)	60,086	12,577
Total Expenses ('000 Col$)	83,363	5,188
Profit or Loss ('000 Col$)	(23,277)	7,389

If FQA maintains its current 23 percent per year interest rate and keeps providing the same services to its borrowers, operational losses will increase. This might cause a viability crisis in the short term. The higher the inflation rate, the sooner such crisis should be expected.

VI.

Mexico

Fondo Mixto para el Fomento Industrial de Michoacan

(FOMICH)

A. The Organizations:

The program involves the following organizations:

(1) the Nacional Financiera SNC (NAFIN): This is a financial agency of the Mexican Federal Government.

(2) the Fondo Mixto para el Fomento Industrial de Michoacan (FOMICH): This is an agency of the State Government of Michoacan, created in 1976. Its purpose has been to promote the development of Michoacan's industrial sector. Before the IDB program, FOMICH's main activities were infrastructure construction and direct risk-capital investment in emerging industrial firms.

(3) La Casa de las Artesanias (LACASA): This is another state entity, created in 1970, in order to organize the artisans and to preserve and develop the state's handicraft industry with technical assistance, marketing, and organization services.

NAFIN's role in the project has been to act as an intermediary between the IDB and FOMICH, the implementing agency. FOMICH performs all of the program's financial operations. LACASA, on the other hand, is supposed to act as a link between FOMICH and the beneficiaries of the project. Project design expected LACASA to select borrowers, help them fill credit applications, and provide them with technical assistance.

B. The IDB-FOMICH Project

In 1985, the IDB began disbursing a loan to FOMICH, using NAFIN as the intermediary, with the purpose of funding a credit and technical assistance program to benefit artisans living in the rural areas of the State of Michoacan. The following are the conditions under which FOMICH received the loan:

(1) Amount: US$500,000, in domestic currency, at the prevailing exchange rate at the time of disbursement.

(2) Terms of Repayment: The term of the loan is 25 years after the first disbursement. FOMICH is expected to cancel the loan through 34 equal bi-annual amortization payments starting after eight-and-a-half years.

(3) Currency of Repayment: FOMICH's debt is denominated in Mexican Pesos. The IDB assumed the foreign exchange rate risk associated to the loan.

(4) Financial Cost: FOMICH's annual financial cost is 1.25 percent on the outstanding balances of the loan. The cost corresponds to annual commission fees paid to the IDB (1 percent) and to NAFIN (0.25 percent).

FOMICH agreed to use the IDB loan to provide credit only to Michoacan's artisans under the following conditions:

(1) Interest Rate: The interest rate was fixed at 29 percent per year,

(2) Term Structure: FOMICH was supposed to allocate 60 percent of the loans at 15 months and 40 percent at 60 months terms.

FOMICH has been using the annual spread between the interest rates it charges to its borrowers and its financial cost as follows:

(a) Eleven percentage points to cover technical assistance and operational expenses,

(b) five percent to create a reserve for bad loans,

(c) two percent to cover collection expenses, and

(d) the remaining spread to reinvest in the credit portfolio.

It is not clear whether FOMICH has made any payments, corresponding to the 11 percentage points for technical assistance and operational expenses, to LACASA. In the proposal for the IDB loan it was stated that LACASA would enjoy 6 percentage points as a compensation for technical assistance and credit allocation services. The audited financial statements for 1985 and 1986 do not record such payments.

It is important to point out that the information available on this program presents important contradictions, in particular about delinquency rates and the use of the resources. Important differences were found between FOMICH's audited financial statements for 1986 and the Project Completion Report (PCR) elaborated by the IDB field office in 1990. In some cases, such contradictions were sorted out for the present purposes. When we believe that the PCR contains erroneous information, both sets of data are presented.

It is apparent that FOMICH is, in any case, under considerable financial and organizational stress.

C. Financial Impact

1. Credit Portfolio

FOMICH began receiving loan disbursements from the IDB and NAFIN in April, 1985. The loan was completely disbursed by May, 1988. Table 1 shows disbursements in

US dollars, as well as the amounts that were available in Mexican Pesos to allocate as loans to artisans.

Table 1: FOMICH: Disbursements Received from the IDB Loan (thousands)

Year	US$	Average Exchange Rate	Mex$
1985	183.8	273.1	50,234
1986	99.7	640.1	63,894
1987	165.4	1,496.0	247,440
1988	59.9	2,281.0	116,556
TOTAL	500.0	956.2	478,126

The original amounts generated by the program implied FOMICH's ability to allocate 478.1 million pesos to credit. As indicated, in addition FOMICH was supposed to use 11 percentage points of its portfolio in order to increase its credit fund. That is, under these optimistic assumptions, FOMICH's credit portfolio originating from the program would be 663.2 million pesos. This amount represents an upper bound, because its calculation assumes that FOMICH experienced zero delinquency, that it allocated new loans immediately after collecting repayments, and that the amounts shown in Table 1 were available during the whole year.

The purpose of this computation is to approximate the delinquency and inflation effects on a best-case scenario basis. This is necessary, because financial information is available up to 1987 only. Also, FOMICH's financial statements for 1987 reflected a loan portfolio balance of 296.1 million pesos as well as other investments with the program's

resources in instruments issued by NAFIN, for 173.6 million pesos. That is, as of December of 1987 the organization had not allocated all of the resources generated by the program to loans for artisans. The best-case senario analysis thus represents the only meaningful way to isolate the effects that delinquency and inflation may have had on FOMICH's ability to deliver real loan balances to artisans.

2. Effects of Inflation

The Mexican economy experienced a severe inflationary process in the 1984-90 period. Table 2 presents the consumer prices indexes and inflation rates for those years. Between 1985 and 1990, the accumulated price increase was 1,382.5 percent. That is, prices multiplied 14.8 times during that period. It is obvious that such rates of inflation have considerably eroded the purchasing power of FOMICH's credit portfolio.

Table 2: Mexico: Inflation Indicators (Consumer Prices)

	1985	1986	1987	1988	1989	1990
Price Index	100.0	186.2	435.7	924.6	1109.3	1482.5
Annual Rate of Price Variations	63.7	86.2	131.8	114.2	20	33.7

Source: IMF, International Financial Statistics, February, 1991.

In order to approximate this effect, it is important to recognize that the disbursements received by FOMICH took place over a four-year period (1985-1988) and that they were converted to their domestic currency equivalents at increasing exchange rates. These higher exchange rates somewhat compensated for the inflationary losses.

Table 3: Approximate Inflation Effects on FOMICH's Credit Portfolio

Year of Disbursement (t)	Amount Disbursed	1990 Price Index for year t=100 (Average)	1990 Real Balances for year t=100	Inflation Erosion Coefficient	Nominal 1990 Equivalent Amount Disbursed
1985	50,234	1,482.5	3.388	0.067	744,719
1986	63,894	796.6	8,014	0.125	508,980
1987	247,440	343.7	71,993	0.291	850,457
1988	116,556	160.4	72,847	0.625	186,956
Total	478,126	306.0	n.a.	0.349	2,291,106

As indicated in Table 3, the 50.2 million pesos disbursed by the IDB in 1985, by 1990 had a purchasing power equivalent to only 3.4 million pesos of 1985. In turn, the 63.9 million pesos disbursed by the IDB in 1986 had, by 1990, a purchasing power equivalent to only 8 million of the former year. Therefore, the total amount disbursed by the IDB in 1986 in 1990 could purchase only 12.5 percent of the goods and services it commanded in the year when it was originally disbursed, and so on. Thus, the total amounts disbursed by the IDB (478.1 million pesos), by 1990 could purchase only about one-third of the goods and services that they commanded in each one of the years when they were originally disbursed.

Another way to view the effects that inflation has had on FOMICH's loan portfolio is to calculate the nominal amount that, in 1990 prices, would be equivalent to the disbursements made by the IDB. Such compution is presented on the last column of Table 3. The result is 2,291.1 million pesos. That is, the 478.1 million pesos disbursed by the IDB should have grown to 2,291.1 million by 1990, in order to compensate for the price changes ocurred between the time of each disbursement and this past year. As already mentioned, the best-case scenario, given project design, would imply a loan portfolio of 663.2 million pesos in

1990, which is just 29 percent of the 2,291.1 million that FOMICH should have had, in order to protect the real portfolio from erosion. It should be clear, in any case, that the annual nominal growth of 11 percent designed for portfolio growth in the program hardly compensates for the damaging effects of annual inflation rates well above 100 percent, as shown in Table 2.

Fortunately for FOMICH and Michoacan's artisans, the IDB did not disburse the totality of the loan in 1985. The delays in disbursement helped to partially keep their real values, by indexing undisbursed amounts to US dollars. Paradoxically, this is a case in which it was better for the organization not to allocate credit, in view of high inflation rates and of interest rates too low to protect the real value of the portfolio.

On the other hand, FOMICH's rigid interest rate policy, given such an inflationary environment, had important consequences on its viability. According to FOMICH's audited financial statements, in 1985 the program's direct operational expenses were 9 million pesos, while in 1986 they rose to 18.9 million pesos. Such doubling of outlays was caused merely by the increase in salaries of the personnel working for the program. Other operational expenses were not accounted for, because they were included in the organization's general operating expense account.

Clearly, a fixed percentage of a nominal amount declines in real terms as prices increase. It can not be expected that FOMICH, or any other organization for that matter, would be able to support, over a period of time, its operational expenses with revenues from a fixed nominal income, in this case eleven percent of the total portfolio, under such circumstances.

In 1985 and 1986, FOMICH received on a cash basis (in contrast to accrued) 509,000 and 7 million pesos, respectively, as interest payments on its credit portfolio. The eleven percentage points allowance for operational expenses for those two years would be, therefore, 193,000 and 2.6 million pesos. This would imply that FOMICH's cash operational losses due to the program were 8.5 million in 1985, and 11.9 million pesos in 1986. Unfortunately, such losses will only increase over time.

The cash interest income reported for 1986 represents 12.7 percent of the average credit portfolio of the year. This is a strong signal of a potentially delinquent portfolio, because the interest rate charged on the loans was 29 percent. In addition, at the end of 1986 FOMICH's balance sheet reflected a total loan portfolio of 75.2 million pesos, while the organization by that time had received 114.1 million pesos from the IDB. This requires a careful delinquency analysis.

3. Delinquency

The delinquency experienced by FOMICH on its credit portfolio has been rapidly increasing since the beginning of the program. Table 4 shows two sets of estimates for delinquency. One was included in the Project Completion Report elaborated by the IDB field office in 1990, while the other one was calculated for the present purposes.

Table 4: FOMICH: Evolution of Portfolio Delinquency

	1985	1986	1987	1988	1989	1990*
IDB's Field Office	n.a.	13.13	8.26	16.85	34.74	37.59
This Report	7.41	23.60	38.24	n.a.	51.95	60.24

*As of May, 1990

The difference in the two measures of delinquency resides in the fact that for the present report, the outstanding credit portfolio at each one of those dates is used as the denominator, while the PCR's uses the accumulated amount disbursed during the life of program. The numerator for the delinquency ratios is the same in both cases and it corresponds to loans in arrears. For instance, the delinquency calculated by the IDB's field office for May, 1990 requires FOMICH's loan portfolio to be 924.2 million pesos as of that date. It should be clear that such amount corresponds to total disbursements, since the upper bound for the portfolio was shown above to be 663.2 million pesos.

In any case, the trend implied by both measures makes it clear that FOMICH's delinquency problem has been increasing over time. The PCR puts forward the following hypotheses to explain such a tendency:

(1) People are not used to go to a far away office to pay;

(2) a belief by borrowers that it is not necessary to pay back government loans;

(3) health problems in the borowing households; and

(4) marketing problems.

Explanation (1) does not seem to be a plausible reason for the increase in loan arrears from 1989 to 1990. This is because in 1989, FOMICH started a new collection method that consists of sending the program's staff to the communities, once a month, in order to collect payments. The staff is now being paid a commission from the 12 percent arrears penalty paid by the artisans on each late payment. Even though health problems, on the other hand, may sometimes be a determinant of delinquency one should not, under normal circumstances, expect them to account for a significant proportion of total loan arrears.

Most of the time, high delinquency rates are explained by either a generalized perception that loan contracts an not enforceable, or by a generalized downturn in the economic activity that represents the most important source of income for the borrowers. FOMICH's delinquency problems might be explained by one of these alternatives or by a combination of both. Thus, FOMICH's delinquency problems most likely have resulted from inappropriate intermediation policies and project design.

A generalized perception that loan contracts are not enforceable should be removed right at the beginning of a credit program. This problem could grow sufficiently to cause organizations to become a collection agency, rather than a financial intermediary. The resulting organizational stress and cash flow shortages further compound the problem. On the other hand, as inflation erodes credit portfolios, not protected by realistic interest rates, and more borrowers get rationed out, the incentive not to pay back increases.

If the organization does not react quickly to the first signs of delinquency, both effects interact, posing serious threats to the program's very existence. FOMICH seems to

be a case study for this. As related by Alicia Pfund, most of the time of its staff is devoted to credit collection efforts.

Diversification is one of the cornerstones of a successful credit program. This is particularly important when dealing with a clientele such as microentrepreneurs, who have a fragile source of income. A problem that might represent a flu for one established firm, could be a deadly pneumonia for a microentrepreneur. In FOMICH's case, most of its borrowers heavily depend on tourism and/or the marketing activities by LACASA. Unfortunately, it appears that Michoacan experienced a deterioration of both determinants of success. Tourism declined and LACASA failed as a marketing agent. Without sales, loan repayment became difficult. The microenterpreneurs felt betrayed and the program lost credibility. In FOMICH's case, nevertheless, the main mistake might have been not to allow diversification via lending to other types of microentrepreneurs and not only to a narrow set of artisans.

E. Lessons Learned

Several important lessons can be learned from FOMICH's experience:

(1) Interest rate policies, inflation, the high costs of administration of small loans, and high delinquency rates are all highly related.

(2) Project design should avoid a concentration of loans in homogenous borrowers and should allow the implementing intermediaries to diversify their portfolios. If one single event, short of a tragedy or natural disaster, can significantly reduce all of the borrowers' ability to repay, then diversification of the portfolio has not been achieved. This may be one of the causes of FOMICH's high delinquency rates, given

the decrease in tourism to Michoacan and the failure of LACASA as a marketing agent. Diversification is particularly important when lending to microenterprises because of the fragility of these businesses.

(3) Project design should consider intermediaries whose objectives and budgets do not depend on changes of political parties in office. Alicia Pfund argues that a significant part of the program's problems can be explained by changes in LACASA's budget, personnel, and objectives resulting from a change in the State Government. On the other hand, FOMICH's Board of Directors is completely made up by high-ranking officers in the State Government. This means that the institution is exposed to sudden changes of programs and objectives.

(4) Before the IDB's program, FOMICH was basically a construction and investment promotion entity, with very diverse activities. FOMICH's activities varied from road construction to direct capital investment in new companies. In 1986, two years after the beginning of the program, credit to artisans represented only five percent of the organization's assets.

It seems that more flexible and specialized organizations can be better vehicles for credit programs. This is because management is more focused on detecting eventual problems and determining relevant changes to be made. Such organizations are able to react in a much quicker fashion. That ability to react with agility is a key determinant of the success of a financial intermediary, particularly in an inflationary and unstable environment, such as in most Latin American economies during the 1980s.

VII.

Dominican Republic

Asociación para el Desarrollo, Inc.

(APEDI)

A. The Organizations:

APEDI is a non-profit organization created in 1962. It operates the following three programs:

(1) the Centro de Investigación y Mejoramiento de la Producción Animal (CIMPA): This is basically an animal husbandry program established in 1974 and devoted to the dissemination of new techniques.

(2) the Vivero Urbano Forestal: This program was established in 1987 and its objective is to contribute to the reforestation of the Dominican Republic.

(3) the Programa de Apoyo a la Microempresa (PROAPE): The program was established in 1981; its activities basically consist of training and technical assistance to small businesses and microenterprises.

(4) the Fondo para el Desarrollo, Inc. (FONDESA): Created in 1982 as the lending arm of APEDI, its target clientele are small businesses and microenterprises. It is supposed to work in coordination with PROAPE.

The liabilities resulting from the IDB loan are recorded on FONDESA's financial statements. The following analysis will focus, therefore, on that organization.

B. The IDB-APEDI Project:

IDB made loans to APEDI in 1983 and 1985, for a total of US$500,000, which are now fully disbursed. The conditions for both loans are basically the same. The only difference is that the 1985 loan has a longer term for repayment. The following is a summary of those conditions:

(1) Amount: The equivalent of US$500,000 in Swiss Francs. The first disbursement corresponded to SwFrc.476,000 (at the time, US$225,000). The 1985 loan corresponded to SwFrc.600,000. Therefore, the US$500,000 corresponded to SwFrc. 3,076,000.

(2) Term for Repayment: APEDI will cancel the 1983 loan by 40 equal bi-annual amortization payments, starting after a ten-and-a-half years grace period from the loan disbursement. The term is 30 years. The 1985 loan should be cancelled by 60 equal bi-annual amortization payments starting on July of 1996. The term is 40 years.

(3) Financial Cost: The IDB charges a one percent annual commission fee on the outstanding balances of the loan.

(4) Currency of Repayment: Amortization and annual commission payments are made in Dominican Pesos. The IDB assumed the foreign exchange rate risk associated to the loan.

According to the IDB-APEDI agreement, the loan was to be used to create a revolving credit fund to extend loans to Dominican microentrepreneurs. Originally, the interest to be charged to the borrowers by FONDESA was 12 percent per year. These

conditions have changed, however, and currently the direct financial cost of borrowing from FONDESA is the following:

(1) Interest rate: 30 percent per year on outstanding balances.

(2) Disbursement Commission: 5 percent of the loan. This is deducted from the amount disbursed.

(3) Commission for PROAPE: 2 percent of the loan deducted from the disbursement. This commission is supposed to compensate PROAPE for the elaboration of the credit application and for technical assistance for the borrower.

(4) Closing Commission: 2 percent of the loan deducted from the disbursement. This corresponds to legalization expenses.

This implies that the nominal financial cost for a 12-month loan is 39 percent per year. The effective interest rate is significantly higher, because of the amounts deducted up-front from the amount disbursed. In July of 1988, APEDI asked the IDB for permission to increase the nominal interest rate charged on the loan. The IDB granted its authorization for the increase on August 4 of that year.

C. The Impact of the IDB Program on the Organization

According to FONDESA, the IDB program represented 46 percent of FONDESA's credit portfolio for 1989. The IDB's contribution to FONDESA is therefore significant, in terms of its volume of operations. Unfortunately, not enough financial information about the loan itself is available, so as to isolate the effect of the IDB program on the organization, on aspects such as operational viability. This is because APEDI's reports are not detailed and consolidate financial date corresponding to very diverse projects. An opera-

tional viability analysis is particularly difficult, because as both AID's Microenterprise Stock Taking and Alicia Pfund report, there is significant subsidization across APEDI's programs. To assess such subsidization would require an extensive on-site analysis of the activities of PROAPE, APEDI, and FONDESA, in order to appraise the necessary expenses for each of their activities and the subsidization across them. For example, it is not possible to exactly determine the amount of the credit portfolio generated by the program up to 1989 from looking at APEDI's reports. This amount could be closely approximated by taking the 46 percent (reported by FONDESA) of the total balance reflected in its financial statement of that year. That amount is 1.07 million pesos.

D. Jeff Poyo's Evaluation

For the AID Stock Taking exercise, Jeff Poyo arrived at the following conclusions about APEDI:

A detailed analysis of the sustainability of the PROAPE/FONDESA program is not possible, because their operations are consolidated with other divisions within APEDI. However, from APEDI's consolidated balance sheets, it is evident that a significant degree of external subsidization is required. Comparative balance sheets show that yearly operational losses were of the order of 108,181 pesos for 1985, 154,457 for 1986, and 100,566 for 1987.

According to a budget for fiscal year 1988, PROAPE received its income from three major sources: grants (56.9 percent), commission on loans through FONDESA and FIDE[11] (38.1 percent), other sources (3.1 percent), and user charges for training courses (1.9 percent). It is interesting to note that its major service, its courses, represents the least important source of revenues.

If the loan request is above 2,400 pesos, the application is channelled to the formal banking system for refinancing by the Investment Fund for Economic Development (FIDE). If, however, it is below this benchmark, the application goes to FONDESA. PROAPE receives a three percent commission on the loans which are channelled through the formal banking system, using FIDE funds, in payment for the preparation of a feasibility study. In addition, if there is a need for further technical assistance, a contract is signed with the client, and PROAPE receives an additional two percent per year on the outstanding balance of the loan. If the loan is channelled through FONDESA, PROAPE receives a one percent commission for the preparation of the study and two percent, in addition, if technical assistance is required as a loan condition. It normally receives the two percent surcharge.

As of November, 1985 FONDESA was legally separated from APEDI. However, the analysis of its sustainability is made difficult by the lack of sufficient financial information. The balance sheet shows that the loan portfolio grew from 424,180 pesos in December 1986 to 570,407 in June 1988. In constant 1980 pesos, the portfolio grew by 8.3 percent in 18 months.

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[11] The Investment Fund for Economic Development is located at the Central Bank. It disburses rediscounting and donor lines of credit for development projects.

FONDESA had been charging its borrowers 12 percent annual average interest, which was then raised to 24 percent and to 39 percent even more recently. Given a monthly inflation of 3 calculated above, the real rate of interest is -1.15 percent per month. Based on calculations from the balance sheets and income statements, FONDESA received interest income which represented 12.6 percent and incurred operating costs which represented 8.8 percent of its portfolio in 1987. These figures seriously underestimate its real operational costs, since advisors from PROAPE serve as loan officers for FONDESA.

Any profitability analysis of each of the different departments within APEDI would require a detailed cost study, to ascertain the distribution of operational expenditures. However, given profits of approximately 5,824 pesos over an 18-month period, it is clear that if the costs had been adequately allocated between divisions, FONDESA would have had an operational loss. The negative rates of interest charged by APEDI will lead to the decapitalization of its net worth.

PROAPE/FONDESA's structure is more complex. The program lacks clear institutional objectives, and is inhibited by the institutional structure of APEDI. Less fluidity exists in the structure, and the fungibility of funds between divisions means that it is more difficult to hold the divisions separately accountable for their activities.

PROAPE/FONDESA is constrained by the social welfare orientation of APEDI, its sponsor, which is in conflict with its business development thrust. Further, its efficiency is undermined by its dependence on FIDE, which has been slow and inefficient. The lack of autonomy and lack of clarity of project goals has handicapped PROAPE/FONDESA.

The diffused and conflicting goals, different clienteles, and lack of strategic thinking about comparative advantage have inhibited PROAPE/FONDESA in achieving self-sustainability, and perhaps improved beneficiary impact as well.